



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/661,532	09/14/2000	Jodi A. Dalvey	946.011US1	8732

21186 7590 03/01/2002

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. BOX 2938  
MINNEAPOLIS, MN 55402

EXAMINER

GRENZYSKI, MICHAEL E

ART UNIT	PAPER NUMBER
----------	--------------

1774

DATE MAILED: 03/01/2002

5

Please find below and/or attached an Office communication concerning this application or proceeding.

MFES

<b>Office Action Summary</b>	Application No. 09/661,532	Applicant(s) DALVEY ET AL.	
	Examiner Michael E. Grendzynski	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 14 September 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> . | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: The term NUCREAL on p 7, l 2, should read NUCREL. Similarly, the term "termolymer" on p 8, l 19 should read "terpolymer." The phrase "ethylene/acrylic/ester/maleic anhydride" on p 8 line 18 should read "ethylene/acrylic ester/maleic anhydride."

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 8, 9, and 12 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. With respect to claims 8 and 9, the specification does not teach or suggest compositions of the primer or second ink-receiving layers. The specification on p 4, ll 13-22 suggests the article comprises both a primer layer and a second ink-receiving layer. In addition, the specification on p 9, ll 18-23, indicates that an ink-receiving layer may be placed on the polymer (image imparting) layer. The composition of these layers, however, is not taught or suggested.

With respect to claim 12, the specification is not enabled for an Escor® Acid terpolymer (i.e., an ethylene-methyl acrylate-acrylic acid terpolymer). The specification neither teaches nor suggests that such a polymer may be used in the image-imparting layer.

Art Unit: 1774

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-9 and 13-16 and 20-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 6 & 7 recite the limitation "the adhesive layer" in line 2. There is insufficient antecedent basis for this limitation in the claim. With specific regard to claim 7, since adhesive layer does not exist in the medium (i.e., since it is not articulated in Claim 1), the position of the release layer within the medium is ambiguous.

Claim 8 recites the limitation "the polymer layer" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites the limitation "the primer layer" in line 2. There is insufficient antecedent basis for this limitation in the claim. In addition, since primer layer does not exist in the medium (i.e., since it is not articulated in Claim 1), the position of the second image-imparting layer within the medium is ambiguous. In addition, the phrase "second image-imparting layer" is questioned. The specification refers only to a second ink-receiving layer. Did applicants intend this?

Claims 13 & 14 recite the limitation "the adhesive layer" in line 2. There is insufficient antecedent basis for this limitation in the claim. In addition, the exact structure of the article is ambiguous. What is the order of the layers? Clarification is requested.

With respect to claims 15-16, does the layer comprise coloring agents or does the layer *further* comprise coloring agents? Clarification is requested.

With respect to claims 20-21, the structure of the medium is ambiguous. Does the structure comprise a layer of ethylene methacrylate copolymer and a layer of Surlyn®, or does the structure

Art Unit: 1774

comprise a single layer comprising a blend of ethylene methacrylate and Surlyn®? If it is the former, which layer further comprises the nylon? Clarification is requested.

With respect to claims 12, 20 and 21, the use of the trademarks Surlyn® and Escor® has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

#### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 4, 6, 7, 10, 11, 13, 14, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamane (US 5350474). Applicants claim an image transfer sheet comprising an ethylene copolymer. Yamane discloses an image transfer sheet comprising an ethylene copolymer. *See* col. 7, ll 12-17 and FIG. 12. It is inherent the Yamane compounds possess releasing and adhesive properties, for it comprises the applicants' identical compound as claimed.

With specific regard to claim 6, applicants' claim a medium comprising an image imparting layer (i.e., a layer comprising an ethylene copolymer) and an adhesive layer. Yamane discloses that its medium further comprises a second adhesive layer, which is equivalent to applicants' adhesive layer. *See* col. 8, ll 13-24.

Art Unit: 1774

With specific regard to claim 7, since adhesive layer does not exist in the medium (i.e., since it is not articulated in Claim 1), the position of the release layer is not dispositive on the issue of patentability. Yamane, moreover, discloses that its medium further comprises a release layer. *See* col. 6, ll 46-49.

With specific regard to claim 13, Yamane discloses that its article further comprises a base layer. *See* col. 6, l 31-32.

With specific regard to claims 17 and 19, Yamane discloses that its article is used with a shirt. *See* FIG. 2.

The limitations of the claims are met by the disclosure of the reference.

7. Claims 1-14 are rejected under 35 U.S.C. 102(a) as being anticipated by Mientus (US 6106982). Mientus discloses an image receiving transfer material comprising (1) a substrate layer, (2) a release layer, (3) a pressure sensitive adhesive layer, (4) a second skin layer; (5) a core layer; (6) a first skin layer; and (6) an imaged layer. *See* FIG. 5 and col. 4, ll 45-57. The second skin layer is equivalent to applicants' image imparting layer. It comprises an ethylene-methacrylate copolymer or terpolymer. *See* col. 9, l 50 through col. 11, l 19. The base layer is equivalent to applicants' base layer—it comprises paper. *See* col. 4, ll 49-50. The core layer is equivalent to applicants' primer layer, and the first skin layer is equivalent to applicants' second ink-receiving (image-imparting?) layer. *See* col. 9, l 50 through col. 11, l 19.

8. With specific regard to claims 10-11, since the Mientus medium teaches all of applicants' claimed compositional and positional limitations, it is inherent that the medium functions in the manner claimed by applicants. That is, since the skin layer of Mientus comprises the exact same compounds claimed by applicants, it is inherent that it possesses the claimed adhesive and releasing properties. The burden is upon the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied upon. To date, this burden has not been sustained.

Art Unit: 1774

9. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kronzer (US 5271990). *See* col. 6, ll 1-6.

10. Claims 1, 2, 7, 8, 9, 10, 11, 13, 14, and 15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bodager (EP 782931). Bodager discloses a receptor sheet comprising (1) a substrate; (2) an anchor layer (3) a release layer; (4) a water-absorbing layer and (5) an ink-receiving layer. *See* Abstract and p 3, ll 16-44.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamane, as applied to claims 1, 4, 6, 7, 10, 11, 13, 14, 17 and 19, above, either alone or in view of Hare (US 4224358). It is obvious to put articles into a container, motivated by the desire of making the articles easier to transport. Consequently, it would have been obvious to one of ordinary skill in the art at the time of the invention to place the Yamane components in a container. Hare provides further evidence that it is known in the art to combine separate articles into a container such as a bag to make transport of the articles easier. *See* col. 3-6.

Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mientus, as applied to claims 1-14, above, either alone or in further view of Hare (US 4224358). With specific regard to claims 17-19, Mientus discloses that its thermal article may be transferred to a substrate. *See* col. 16, ll 49-56. It is obvious to put articles into a container, motivated by the desire of making the articles easier to transport. Consequently, it would have been obvious to one of ordinary skill in the art at the time of

Art Unit: 1774

the invention to place the article and permanent substrate of Mientus in a container, motivated by the desire of storing the components together and making the collective transport of these components easier. Hare provides further evidence that it is known in the art to combine separate articles into a container such as a bag to make transport of the articles easier. *See* col. 3-6.

12. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mientus, as applied to claims 1-14, above, in view of Surlyn® Product Bulletin. Mientus discloses that the core layer may comprise ethylene methacrylate (*see* col. 8, ll 14-15) and/or nylon (*see* col. 8, l 12). It is important to note that Surlyn®, by definition is an ethylene methacrylate copolymer. *See* Product Bulletin.

13. Claims 1, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Kronzer (US 5271990) in view of either the Photopia® or Chromicolor® Product Bulletins. Kronzer discloses a thermal transfer paper comprising a substrate, a melt-transfer film and an image-receptive film. *See* col. 4, ll 52-67. The image-receptive film is equivalent to applicants' image-imparting layer—it comprises an ethylene copolymer. *See* col. 6, l 6. While not limiting the additives which may be added to its image-receptive layer, Kronzer does not specifically disclose the use of thermosensitive colorants. The Photopia® Product Bulletin teaches that photochromic colorants may be added to the ink layer (and thus the resulting image) of thermal transfer paper. *See* Photopia® Product Bulletin. The Chromicolor® Product Bulletin, moreover, teaches that thermochromic colorants may be used in ink layers (and thus the resulting image) of thermal transfer papers to provide an ink that changes color with change in temperature. *See* Chromicolor® Product Bulletin. It would have been obvious to one of ordinary skill in the art at the time of the invention to use a colorant responsive to UV-light such as Photopia® colorants in the Kronzer heat transfer paper, motivated by the desire of providing “color changing excitement” to the Kronzer medium, as taught by the Photopia® Product Bulletin. Similarly, it would have been obvious to use a colorant responsive to temperature in the Kronzer heat transfer paper, motivated by the desire of



Art Unit: 1774

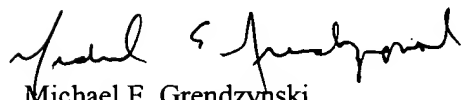
providing an image that would change color with change in temperature, as taught by the Chromicolor® Product Bulletin.

***Conclusion***

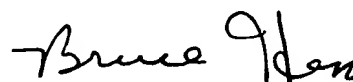
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael E. Grendzynski whose telephone number is 703-305-0593. The examiner can normally be reached on weekdays, from 9:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 703-308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2351.



Michael E. Grendzynski  
Assistant Examiner  
February 22, 2002



BRUCE H. HESS  
PRIMARY EXAMINER  
GROUP 1300